

SYNONYMY OF SOME LAND MOLLUSCA FROM PAPUA
OR NEW GUINEA.

BY J. BRAZIER, C.M.Z.S., &c., &c.

In the Annals and Magazine of Natural History, Vol. XI., fifth series, 1883, Mr. Edgar A. Smith described four new species of Helicidæ said to have been collected at D'Entrecasteaux Island, off the South-east of New Guinea. The four species so described were not from D'Entrecasteaux Island, but were collected by Messrs. Goldie, Rolls, Cairn, and Hunstein, inland from Port Moresby, under the Astrolabe Range of Mountains.

Mr. Goldie's party did send home birds collected on D'Entrecasteaux Island; and it is quite evident that they got into some dealers hands who came to the conclusion that the shells must have come from the same place as the birds. Mr. Smith says that besides the new species the collection includes examples of *Helix Tayloriana*, Adams and Reeve; *H. yulensis*, Brazier; *Helix Broadbenti*, Brazier; and a very beautiful variety of *Helix corniculum*, Hcmb. and Jacquinot. One of Mr. Smith's species I have renamed, as his name had been previously given to a fossil species.

1. HELIX (OBBA) GOLDIEI.

Helix Goldiei, Brazier. Proc. Linn. Soc., N.S.W. Vol. 5, p. 637, 1880. *Helix (Obba) oxystoma*, E. A. Smith. (non Thomae.) Annals. Mag. Nat. Hist., 5 series. Vol. XI., p. 191, 1883.

Hab.—The foot of the Mount Astrolabe and Owen Stanley Range, New Guinea (Mr. A. Goldie.)

There is already a fossil species named *Helix oxystoma*, Thomae. Nass. Jahrl. 2, p. 136, in Sandberger Die Land-und Süßwasser-Conchylien 1870-1875. The *oxystoma* of E. A. Smith I have changed to *Goldiei*. It was on the 29th of December 1880, that I exhibited before this Society two *Helices* named *Goldiei* and *Hunsteinei*, and at the following Meeting held in January 27th 1881, I described the two above named species, but by some unaccountable means the papers with my description appear to have got either lost or mislaid by the Secretary.

2. *HELIX* (*GEOTROCHUS*) *ZENO*.

Helix (Geotrochus) Zeno, Brazier. Proc. Linn. Soc., N.S.W. Vol. I., p. 107, 1876. *Helix (Geotrochus) latiaxis*, E. A. Smith. Annals. Mag. Nat. Hist., 5 series. Vol. XI., p. 191.

Hab.—Hall Sound, New Guinea, Brazier. Laloki or Goldie River, Broadbent. Foot of Mount Astrolabe and Owen Stanley Range, Goldie, Rolls, Cairn and Hunstein.

During the Chevert Expedition to New Guinea, we obtained a few specimens of this species on the mainland of New Guinea at Hall Sound. They were found in the thick forest on a high ridge; since then it was collected by Mr. Broadbent on the banks of the Laloki or Goldie River, and twice since by Mr. Goldie and his party under the Mount Astrolabe and Owen Stanley Range.

The other species described by Mr. Smith as *Helix (Geotrochus) Tapparonei*, Mr. H. Hunsteini, with the indentation in the outer lip is somewhat allied to *Geotrochus Macgillivrayi*, Forbes. The lip of *H. Tapparonei*, is of an intense jet black colour, some specimens are spirally banded, others again are pure white like beautiful porcelain, some again have the whole outer surface of a rich rose tint with the lip bright jet black; the species is very rare and was obtained under the Mount Astrolabe and Owen Stanley Ranges. The other species described by Mr. Smith is named *Helix (Sphaerospina) Genardi*. It appears that when this was described Mr. Smith had only one specimen in the British Museum; as I have some dozens of them I can confirm Mr. Smith's opinion

that it is a true species, and in no way distorted. The spine is granulated but it does not extend to the last whorl. Mr. Smith states "that the granules are arranged in such a manner as to form oblique series in two directions or in a criss-cross direction; they are excessively minute and crowded upon the topmost whorls, and gradually enlarge and become further apart as the shell grows. In addition to the sculpture already mentioned, there are indications on the body whorl of a few shallow transverse indistinct sulci, with faintly elevated broad ridges between them, especially around the middle. The apex of this species is peculiar; for the nucleus coils in and downwards and is less raised than the second whorl." The granulation around the spine of this species is very much after some of the Australian forms.

THE TIME OF THE GLACIAL PERIOD IN NEW ZEALAND.

BY DR. R. v. LENDENFELD, PH.D.

In a recent Paper (1) I described the principal Glaciers of New Zealand of the present time, and I have found occasion several times to refer to the Glacial Period, which has left most striking traces in all parts of that country.

Von Haast (2) has furnished a Map of the Glaciers of the cold period, which shows that several of the ice-streams of that period extended down to the sea.

I had occasion to observe the characteristic scratches on the rocks in the Sounds of the West-coast close to the waters edge, which prove the correctness of Von Haast's views.

The Sounds in the southern part of the West-coast of the Middle Island of New Zealand are a most striking topographical feature. Similar Sounds are found in Norway and Kamtchatka, also there the traces of glaciers are to be seen on their steep sides.

(1) *R. v. Lendenfeldl.* Der Tasman Gletscher und seine Umgebung. Petermanns Geografische Mittheilungen. Ergänzungsheft.

(2) *T. v. Haast.* Geology of Canterbury and Westland, Plate II. p. 371